

layer and the oxide layer are removed by the photolithography and dry etching until the first silicon nitride layer underlying is about exposed, and the photoresist is stripped by using the wet strip or the dry strip. Afterward, both the silicon nitride layers are stripped by using the hot phosphoric acid in the wet bench, and the thermal oxide layer is removed by the wet etching while using the hydrofluoric acid as the etching solution, so that the shallow trench isolation structure is formed. Therefore, the shallow trench isolation structure can be obtained without the chemical mechanical polishing process by employing the present invention, and not only the process cost can be reduced but also the yield can be enhanced. Furthermore, the thickness of the silicon nitride layer and the oxide layer can be controlled, and the stress problem resulted from the thick silicon nitride layer can be avoided in the present invention.

Please amend the paragraph beginning on line 19, page 8, and carrying over onto page 9, as follows:

Referring to FIG. 13, after the dry etching process, the photoresist 212 is stripped by using the wet strip or the dry strip so that the silicon nitride layer 210 is exposed. Subsequently, the silicon nitride layer 204 and the silicon nitride layer 210 are stripped by hot phosphoric acid in a wet bench. Since the oxide layer 208 outside the shallow trench 206 is sandwiched in between the silicon nitride layer 204 and the silicon nitride layer 210 and is only contacted with the silicon nitride layer 204 and the silicon nitride layer 210, so the oxide layer 208 outside the shallow trench 206 is also stripped because the foundation therebeneath is lost while the silicon nitride layer 204 is stripped. And the thermal oxide layer 202 is removed by the wet etching while using the hydrofluoric acid as the etching solution, so that the completed shallow trench isolation structure 214 is formed, as shown in FIG. 14.